

MANUFACTURE OF SEMICONDUCTOR DEVICE

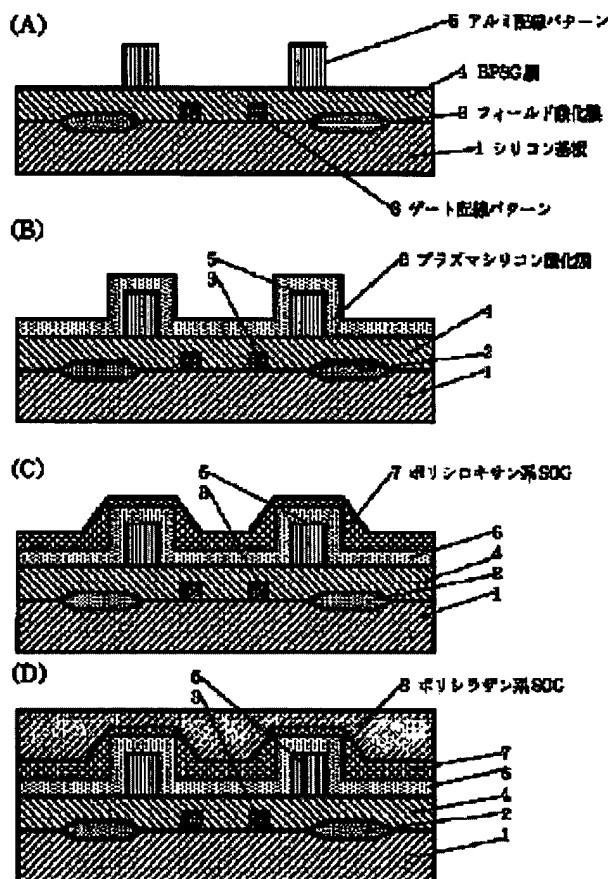


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Abstract of JP2000058646

PROBLEM TO BE SOLVED: To improve quality and flatness by thermally treating a flattened film at a low pressure after a silicon oxide film formed on a step difference part is coated with a polysiloxane based SOG (spin on glass) and it is coated with polysilazane based SOG.

SOLUTION: A field oxide film 2 is formed surrounding a diffusion region of a silicon substrate 1. After a polycrystalline silicon layer is deposited on the field oxide film 2, a gate wiring pattern 3 is formed by photolithography. On the pattern 3, a BPSG (boron phosphorus containing silicate glass) film 4 is deposited, on which an aluminum alloy layer is formed. An aluminum wiring is patterned, and aluminum wiring patterns 5 are formed, on which a silicon oxide film 6 is deposited. Polysiloxane based SOG 7 to be buried in recessed parts between the aluminum wiring patterns 5 which cannot be filled with the silicon oxide film 6 is spin-coated. The SOG 7 is coated with polysilazane based SOG 8.



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